

Lesson Overview: Students will become familiar with different measurements used for water travel and measurements used by the French in the 1700s, before the metric system was adopted. Students will use excerpts from Colonel Franquet's journal that describe distance measurements taken along Lake Champlain and will convert them into familiar measurements of miles and feet.

Vermont Standards: This activity addresses the following standards:

- 1.4 Reading Range of Text
- 6.4 Historical Connections
- 6.7 Geographic Knowledge
- 7.3 Arithmetic, Number, and Operation Concepts

Materials: 1 worksheet per student (page 2 of this activity)

Scrap paper for calculations

Available resources for students to find length of Lake Champlain
(i.e. Internet or books)

Procedure:

1. Begin a discussion about modern and historic measurements used for distance.
2. Have students look over the directions and the table of measurements and practice a few conversions between miles and leagues, and feet and toises.
3. Have students complete the worksheet on their own.

Connections:

Have students think about the accuracy of the calculations from the journal excerpt.

What are some factors that could impact the accuracy and distance of Franquet's voyage on Lake Champlain? (weather conditions, navigational skills, technology in measuring)

Have there been improvements in modern times that have changed the impact of these factors?

Pre-visit Math Activity Worksheet

Directions: Using the Table of Measurements and the excerpts from Colonel Franquet's journal below, answer the following questions by converting the measurements.

Table of Measurements	
1 League	3 Miles
1 Toise	≈ 6.365 Feet

"It is about 9 leagues from the Fort St. Jean to the home of Monsieur La Bonte."

"I think we went about 20 leagues from the habitation of M. La Bonte up to Canoe Point..."

"It is about 13 leagues from Canoe Point to this fort, estimating the 3 days for this part of the trip, that would be only ___?___ leagues from St. Jean, but it is usually estimated at 45 leagues."

-Excerpts from the journal of Colonel Franquet, Government Inspector of Fortifications

1. How many leagues total was the distance Colonel Franquet measured between Fort St. Jean and Fort St. Frédéric? How many miles is this?
2. Colonel Franquet said that the distance between forts is usually estimated at 45 leagues. How many miles is this distance?
3. Do research to find out the current length of Lake Champlain in miles. What is this distance in leagues?
4. What is the average distance that Colonel Franquet traveled over his 3-day voyage, in leagues and miles?

"... the distance between the big Isle aux Têtes and the small islands of the same name is only 300 toises"

5. What is the equivalent of 300 toises at the present time?